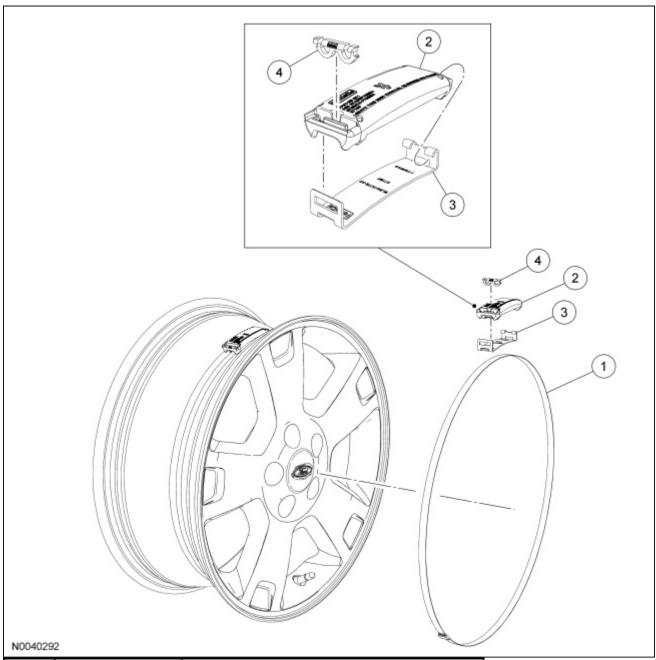
Tire Pressure Monitoring System (TPMS) Strap and Cradle

Material

Item	Specification
Wheel and Tire Cleaner ZC-37-A	_



Item	Part Number	Description		
1	1A177/1A193	Strap/strap kit		

2	1A150/1A189	Tire pressure sensor/sensor kit
3	1A175	Sensor cradle (also part of 1A193)
4	14C202	Locking clip (also part of 1A189)

Disassembly

WARNING: The tire pressure monitoring system (TPMS) sensor battery may release hazardous chemicals if exposed to extreme mechanical damage. If these chemicals contact the skin or eyes, flush immediately with water for a minimum of 15 minutes and get prompt medical attention. If any part of the battery is swallowed, contact a physician immediately. When disposing of TPMS sensors, follow the correct procedures for hazardous material disposal. Failure to follow these instructions may result in serious personal injury.

NOTE: Tire pressure sensors are equipped with Lithium-ion batteries and must be disposed of accordingly.

NOTE: Tire pressure sensors are manufactured in multiple colors based on their application. When installing a new sensor, make sure the color of the sensor being installed matches the color of the sensor that was removed. The different colored sensors are **not** interchangeable.

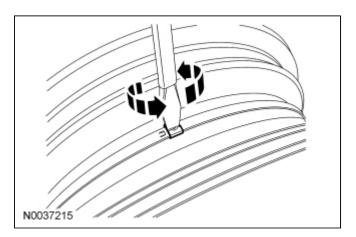
NOTE: The sensor is available separately, the cradle and strap are available as a strap kit. There are several different strap kits available based on wheel diameter, but all strap kits share the same base part number.

- 1. Remove the Tire Pressure Monitoring System (TPMS) sensor. For additional information, refer to <u>Tire</u> Pressure Monitoring System (TPMS) Sensor in this section.
- 2. WARNING: Always wear eye protection when servicing a vehicle. Failure to follow this instruction may result in serious personal injury.

WARNING: Wear protective gloves when handling components or parts that have pointed or sharp edges. Failure to follow this instruction may result in serious personal injury.

Remove a factory-installed strap in the following sequence:

- 1. Locate the strap buckle and secure the strap to the wheel using duct tape or a similar item on both sides of the buckle, approximately 25 mm (0.98 in) from the buckle.
- 2. Using a large screwdriver and a twisting motion, unbuckle the strap.
- 3. Discard the strap.



- 3. To remove a dealer-installed strap, turn the worm gear screw until the strap is fully released from the worm gear.
 - Discard the strap.

4. **NOTE:** To aid assembly, mark the location of the cradle prior to disassembly.

Using a screwdriver, or similar tool, remove the cradle by inserting the screwdriver under the cradle and prying up. An animated version of this procedure is available on-line.

Assembly

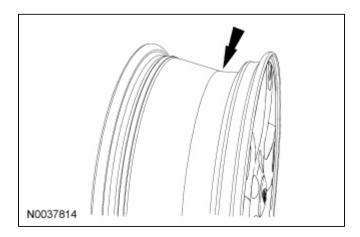
1. **NOTE:** Make sure the sensor is fully seated into the new cradle. The sensor will make a "click" noise when fully seated.

Position the sensor into the new cradle by inserting the hinge end of the sensor into the hook end of the cradle and pushing the opposite end of the sensor down onto the cradle.

2. *NOTICE:* Metal scrapers may damage the wheel. Use only plastic or non-metallic scrapers to remove the cradle adhesive strip residue.

NOTE: The sensor and cradle must be installed in the drop well of the wheel, 180 degrees from the valve stem.

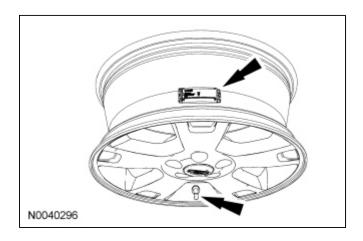
Using wheel and tire cleaner, clean the area where the sensor and cradle are to be installed.



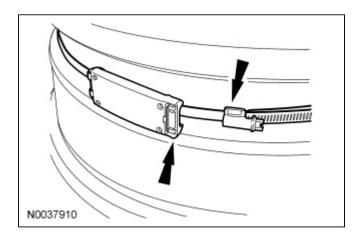
3. **NOTE:** The sensor and cradle must be positioned with the hinge side of the sensor on the RH side when viewed from the curb side (beauty side) of the wheel.

NOTE: The sensor has raised markings indicating how to position the sensor.

Remove the adhesive tape liner from the cradle and position the sensor and cradle into the wheel drop well 180 degrees from the valve stem. A video version of this procedure is available on-line.



4. Install the tapered end of the strap through the opening of the cradle on the hinge side of the sensor. This will position the worm gear on the locking clip side of the sensor. An animated version of this procedure is available on-line.

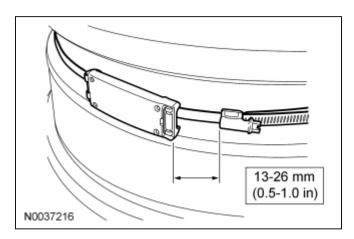


5. NOTICE: Steel wheels have a "high spot" along their circumference. Make sure the strap and sensor are mounted at the lowest spot possible to avoid damaging the sensor during wheel and tire disassembly and assembly.

NOTE: Keep the strap parallel with the wheel flange while tightening the worm gear.

Position the worm gear 13-26 mm (0.5-1.0 in) away from the sensor and tighten the worm gear.

• Tighten to 3 Nm (27 lb-in).



6. *NOTICE:* The sensor, cradle and strap may be damaged by incorrect tire mounting or dismounting. Mount the tire only as instructed.

Install the tire onto the wheel. For additional information, refer to Wheel and Tire in this section.

7. **NOTE:** A new tire pressure sensor is shipped in an off mode (or battery saver mode) and must be turned on before it can be trained. To turn the sensor on, install it on a wheel, mount the tire and inflate the tire to the recommended inflation pressure. Wait at least 2 minutes, then continue with the sensor training procedure.

Train the tire pressure sensor(s). For additional information, refer to <u>Tire Pressure Monitoring System (TPMS)</u> <u>Sensor Training in this section.</u>